Amendments to the Claims

Listing of Claims:

Claims 1 - 15 (canceled)

Claim 16 (new): A method of determining a load characteristic (K_1) indicating a load level on an electrical primary component (2) of an electrical power distribution network, the method which comprises:

recording description values ($\tilde{M}$) describing an operating state of the primary component by way of a sensor (3) connected to a field appliance (5) carrying out functions related to an automation of the power distribution network;

determining an overall sum of the description values ($\tilde{M}$) over a duration of at least one predeterminable time interval to form a load intermediate value (K*); and

producing the load characteristic (K_1) in dependence on a magnitude of the load intermediate value (K*) in comparison with a predeterminable load limit value.

Claim 17 (new): The method according to claim 16, which comprises outputting the load characteristic (K_1) from the field appliance (5) or from a data processing device (10) connected to the field appliance (5).

Claim 18 (new): The method according to claim 16, which comprises producing a load signal (W_1) and emitting the load signal (W_1) from the field appliance (5) or from a data processing device (10) connected to the field appliance (5), as a function of the magnitude of the load characteristic (K_1), when the load characteristic (K_1) indicates that the load on the primary component (2) is particularly low and/or particularly high.

Claim 19 (new): The method according to claim 16, which comprises utilizing a sensor that is already present in the automation system to record the description

values $(\tilde{M})$.

Claim 20 (new): The method according to claim 16, which comprises using as description values $(\tilde{M})$ measured values of a primary measurement variable.

Claim 21 (new): The method according to claim 20, wherein the primary measurement variable is a current through the primary component (2).

Claim 22 (new): The method according to claim 20, wherein the primary measurement variable is a voltage applied to the primary component (2).

Claim 23 (new): The method according to claim 20, wherein the primary measurement variable is a temperature of the primary component (2).

Claim 24 (new): The method according to claim 16, which comprises:

repeatedly producing the load characteristic (K_1); and

adding successive load intermediate values (K*) in a sum memory (13) to form an aging characteristic (K_2).

Claim 25 (new): The method according to claim 24, which comprises outputting the aging characteristic (K_2) from the field appliance (5) or from a data processing device (10) connected to the field appliance (5).

Claim 26 (new): The method according to claim 24, which comprises:

generating, with the field appliance (5) or a data processing device (10) connected to the field appliance (5), an aging signal (W_2) as a function of a magnitude of the aging characteristic (K_2) in comparison with a predetermined aging limit value; and

outputting the aging signal (W_2) from the field appliance (5) or the data processing device (10).

Claim 27 (new): The method according to claim 24, which comprises setting a sum memory (13) to zero value on starting up the primary component (2).

Claim 28 (new): The method according to claim 24, which comprises setting a sum memory (13) to a start value on starting up the primary component (2), the start value taking account of a previous use of the primary component (2).

Claim 29 (new): The method according to claim 24, wherein the primary component is a circuit breaker (2a) with switching contacts, and the method comprises determining the description values $(\tilde{M})$ in each case only while the switching contacts of the circuit breaker (2a) are open.

Claim 30 (new): The method according to claim 16, wherein the primary component is a circuit breaker (2a) and the method further comprises:

determining a number of switching processes carried out by the circuit breaker (2a) with the field appliance (5);

determining an aging switching value (A) from the number of switching processes; and

outputting the aging switching value (A) or a warning message derived therefrom with the field appliance (5) or with a data processing device (10) connected to the field appliance (5).